STATE OF NEW HAMPSHIRE
STATE OF NEW HAMPSHIRE BOARD OF PHARMACY

ADDENDUM # 2 TO RFP INVITATION # 2014-042

Proposals Due: Jan 31, 2014 TIME OF BID OPENING: 2:30

FOR: **New Hampshire Board of Pharmacy Prescription Monitoring System RFP**

RFP SECTION	CHANGE DESCRIPTION
Section 1.2 Contract Term	Replace paragraph 2 in its entirety to read as follows: The Vendor shall be fully prepared to commence work by March 2014, after full execution of the Contract by the parties, and the receipt of required governmental approvals, including, but not limited to, Governor and Executive Council of the State of New Hampshire approval ("Effective Date").
Section 4.1	Replace reference to RFP 20114-41 with RFP 2014-041
Appendix C Table C-2 Requirement B 5.2	See addition of Tables F-6 and F-7 below
Section C Table C-2 Requirement T1.8	Delete Requirement
Section H-25.8.1 Software License Grant	Add the following Paragraph 3 If the Vendor proposes Software as a Service and purchase of the license is not part of the vendor proposal, license terms may reflect a non-exclusive, non-transferable limited license to use the Solution and its associated Documentation during the Term of the Agreement.
Section H-25.10	Add the following as H-25.10.2.7 Except as otherwise provided herein, Vendor disclaims all warranties, express or implied, with regard to the System, Solution, Deliverables, and Services, including but not limited to implied warranties of fitness for a particular purpose and merchantability.
Section H-25.12.7 Intellectual Property	Replace paragraph 1 in its entirety to delete the parenthetical as follows: Upon successful completion and/or termination of the Implementation of the Project, the Vendor shall own and hold all, title, and rights in any Software modifications ~~(Custom Code??)~~ developed in connection with performance of obligations under the Contract, or modifications to the Vendor provided Software, and their associated Documentation including any and all performance enhancing operational plans and the Vendors' special utilities. The Vendor shall license back to the State the right to produce, publish, or otherwise use such software, source code, object code, modifications, reports, and Documentation developed under the Contract.
Section H-25.12.14 Confidential Information	New Hampshire cannot participate at this time in inter-state data sharing. They can only share data on a case by case basis; but they cannot share the NH PMP data base in full with another state.
Appendix G-2 Testing Requirements	See Modified Appendix G-2 below.

H-25.1 - 5	Question 63 refers to general requirements on page 65 in Section H-25. The question is not specific enough for a clear answer. While the state acknowledges that Software as a Service may dictate a different implementation methodology, if the State needs driving the requirements remain, the requirements must also remain. Any changes in the requirements must be at the States option and must pertain to a State need made irrelevant by the Software as a Service approach.
H-25.10.3 Part d	Modify Section H-25.10.3 part d to read as follows: **d**. On-site, telephone, or remote access additional Services within four (4) business hours of a request;
H-25.22	Add the following paragraph as H-25.22.1 25.22.1 Upon termination of the contract by NHBP, or six months prior to the expiration of the contract, the Contractor shall provide to NHBP a written transition plan designed to ensure a smooth turnover of data from the Contractor to NHBP. The Contractor shall take all reasonable action to provide a minimally disruptive transition. The NHBP shall approve this plan prior to its implementation.
H-25.22	Add the following paragraph as H-25.22.1 25.22. 2 At no additional cost to NHBP, the Contractor shall ensure the transfer to NHBP of all electronic and paper files, including archived files, at the termination of the contract. The software used to access and view these files shall not be proprietary and shall not in any manner preclude access to the files by NHBP. NHBP reserves the right to transfer all data to any future Contractors. Final payment by NHBP shall be withheld pending receipt and acceptance of all data by NHBP.
Section F-6 and F-7	Add Sections F-6 and F-7 below in order to include option vendor offerings for State consideration. Neither of these sections shall add or delete mandatory requirements from or to the RFP and the utilization of the optional offerings shall be at the option of the State.

F-6 Optional Reductions

Due to limited resources and less than perfect knowledge of how each vendor's systems are constructed, the State believes that individual vendors may be in the best position to make suggestions for value engineering their proposal so as to yield a more cost effective but still viable system. In the table below, vendors may suggest subsystems or features which may be removed from the proposed package. The subsystem or feature should be named, described and the requirements which will not be met as a consequence of the reduction must be listed along with the reduction to the resultant price. The percent of Mandatory requirements met must still meet the standard given in Appendix B-2 above. The price reduction must be attributed to reductions in license purchase, installation, maintenance and/or hosting prices. The baseline vendor proposal reflected in tables F-1 through F-5 shall be used for price scoring purposes but a proposal with options may be considered more flexible and scored as such.

Table F-6: Optional Reductions

SUBSYSTEM OR FEATURE NAME	DESCRIPTION	REQUIREMENTS NOT MET	REDUCTION TO PRICE AND BREAKDOWN

F-7 Optional Additions

For value engineering purposes the State desires information on modules or features which are available but were not included in the Vendor's baseline proposal outlined in F-1 through F-5 above. In the table below, vendors may suggest subsystems or features which may be added to the proposed package. The subsystem should be named and described and include the addition to the resultant price. The price addition must be broken down and attributed to additions in purchase, installation, maintenance and/or hosting prices. The baseline vendor proposal shall be used for scoring purposes but a proposal with options may be considered more flexible and scored as such.

Table F-7: Optional Reductions or Additions

SUBSYSTEM OR FEATURE NAME	DESCRIPTION	ADDITION TO PRICE AND BREAKDOWN

RFP SECTION	CHANGE DESCRIPTION
Appendix G-2	Replace Appendix G-2 in its entirety with the following Appendix G-2 Testing Requirements :

APPENDIX G-2 TESTING REQUIREMENTS

All testing and acceptance addressed herein shall apply to testing the System. This shall include planning, test scenario development, Data, and System preparation for testing, and execution of System integration testing, conversion/migration testing, installation testing, performance, and stress testing, Security review and testing, and support of the State during user Acceptance Testing (UAT).

G-1.1 Test Planning and Preparation

The overall Test Plan will guide all testing. The Vendor provided, State approved, Test Plan will include, at a minimum, identification, preparation, and Documentation of planned testing, a requirements traceability matrix, test variants, test scenarios, test cases, test scripts, test Data, test phases, expected results, and a tracking method for reporting actual versus expected results as well as all errors and problems identified during test execution.

It is crucial that client training and testing activities not be abbreviated in order to meet Project Implementation Schedules. Therefore, the State requires that the testing activities be represented both in terms of effort and duration.

Vendors must disclose in their proposals the scheduling assumptions used in regard to the Client resource efforts during testing.

State testing will commence upon the Vendor Project Manager's certification, in writing, that the Vendor's own staff has successfully executed all prerequisite Vendor testing, along with reporting the actual testing results, prior to the start of any testing executed by State staff.

The State will commence its testing within five (5) business days of receiving Certification from the Vendor that the State's personnel have been trained and the System is installed, configured, complete, and ready for State testing. The testing will be conducted by the State in an environment independent from the Vendor's development environment. The Vendor must assist the State with testing in accordance with the Test Plan and the Work Plan, utilizing test and live Data to validate reports, and conduct stress and performance testing, at no additional cost.

G-1.2 Testing

Testing begins upon completion of the Software configuration as required and user training according to the Work Plan. Testing ends upon issuance of a letter of UAT Acceptance by the State.

Vendor must demonstrate that their testing methodology can be integrated with the State standard methodology.

System Integration Testing	a.) Validates the integration between the individual unit application components and verifies that the new System meets defined requirements and supports execution of interfaces and business processes. The Systems Integration Test is performed in a test environment. b.) Emphasizes end-to-end business processes, and the flow of information across applications. It includes all key business processes and interfaces' being implemented, confirms data transfers with external parties, and includes the transmission or printing of all electronic and paper documents. c.) The State will conduct System Integration Testing, utilizing scripts developed, as identified in the Test Plan, to validate the functionality of the System and its interfaces. The State will also use System Integration Testing to validate modifications, fixes and other System interactions with the Vendor supplied Software Solution.
Conversion /Migration Validation Testing	The Conversion/Migration Validation Testing should replicate the entire flow of the converted data through the Software Solution. As the Software Solution is interfaced to legacy or third-party applications, the testing verifies that the resulting converted legacy data performs correctly.
Installation Testing	Application components are installed in the System test environment to test the installation routines and are refined for the eventual production environment. This activity serves as a dry run of the installation steps in preparation for configuring the production System.
User Acceptance Testing (UAT)	The User Acceptance Test (UAT) is a verification process performed in a copy of the production environment. The User Acceptance Test verifies System functionality against predefined Acceptance criteria that support the successful execution of approved business processes. a.) The Vendor's Project Manager must certify in writing, that the Vendor's own staff has successfully executed all prerequisite Vendor testing, along with reporting the actual testing results prior to the start of any testing executed by State staff. b.) The State will be presented with a State approved Test Plan, test scenarios, test cases, test scripts, test data, and expected results, as well as written Certification of the Vendor's having completed the prerequisite tests, prior to the State staff involvement in any testing activities c.) UAT will also serve as a performance and stress test of the System. It may cover any aspect of the new System, including administrative procedures such as backup and recovery. The results of the UAT provide evidence that the new System meets the User Acceptance criteria as defined in the Work Plan. d.) Upon successful conclusion of UAT and successful System deployment, the State will issue a letter of UAT Acceptance and the respective Warranty Period shall commence as described in Section H-25.10.1: Warranty Period.

Performance Tuning and Stress Testing	Vendor shall develop and document hardware and software configuration and tuning of System infrastructure as well as assist and direct the State's System Administrators and Database Administrators in configuring and tuning the infrastructure to support the software throughout the project

Performance Tuning and Stress Testing

Scope

The scope of performance testing shall measure the system level metrics critical for the development of the applications infrastructure and operation of the applications in the production environment. It will include the measurement of response rates of the application for end-user transactions and resource utilization (of various servers and network) under various load conditions. These response rates shall become the basis for changes and retesting until optimum system performance is achieved.

The application transactions shall be identified with specific roles and selected transactions shall be recorded for the performance measurements. These will be compared to baselines to determine if object and/or system performance increases as changes are made.

Performance testing shall consider the full scope of the application infrastructure with emphasis on the most heavily used or shared transactions. Performance testing of the application will profile the identified user transactions and assist in the identifying performance gaps to improve the most critical parts of the applications.

Performance testing and tuning shall occur in the final production environment and shall use a copy of the final production database to provide the best results.

Vendor must lead this effort. Responsibilities include identifying appropriate tunable parameters and their default and recommended settings, developing scripts, which accurately reflect business load and coordinating reporting of results.

Test types

Performance testing shall use two different types of tests to determine the stability of the application. They are baseline tests and load tests

Baseline Tests: Baseline tests shall collect performance data and load analysis by running scripts where the output is broken down into business transactions or functions. The test is like a single user executing a defined business transaction. During baseline testing, each individual script is run to establish a baseline for transaction response time, throughput and other user-based metrics. Usually each business transaction is executed multiple times during a single test run to obtain an average for the user-based metrics required for the performance testing evaluations. It must be noted that changes made to the code after baseline testing is completed will skew the results collected to date. All effort will be made to provide a code test base that is tested in the environment for problems prior to the establishment of the baseline, which are used in future testing and tuning efforts. Any changes introduced into the environment after performance testing has started can compromise the accuracy of the results and will force a decision to be made whether baseline results need to be recreated.

Load Tests: Load testing will determine if the behavior of a system can be sustained over a long period of time while running under expected conditions. Load tests helps to verify the ability of the application environment under different load conditions based on workload distribution. System response time and utilization is measured and recorded.

Tuning

Tuning will occur during both the development of the application and load testing. Tuning is the process whereby the application performance is maximized. This can be the result of making code more efficient during development as well as making tuning parameter changes to the environment.

For infrastructure tuning, parameters will be identified for all components prior to undertaking the load testing efforts. This should include a list of the variables, their definitions, the default settings, range of acceptable settings and the settings as testing begins. This will permit the team to identify the areas of most potential gain and a starting point. Tuning is a process which is repeated until the team feels that the systems are running at or near optimum performance.

Implementing Performance and Stress Test

Performance and Stress test Tools must be provided by the vendor for this effort. Consideration must be give to licensing with respect to continued use for regression testing. If the vendor is familiar with open source low/no cost tools for this purpose those tools should be identified in your response.

Scheduling Performance and Stress Testing

Vendor shall perform test planning. The steps for planning include identification of application functionality as well as what percentage of normal daily use is represented by each function. This information will become the foundation for scripting so that tests closely represent what loads in production will look like.

Vendor shall provide definition and expectations from testing. This definition should include who is in charge of testing and coordinating results, anticipated run times, logs required for tracking, their locations and which technician is responsible to track and provide them following each test to the team.

Initial test runs shall be completed to establish that the tests and data sets can be run to completion without errors. The ratio of types of transactions which makeup the test shall be reviewed prior to the beginning of testing and then again once testing has begun to make sure that testing accurately reflects the system performing in production.

Initial tests shall be used to establish a baseline from which all subsequent tests will be compared. Tests will be considered for baseline status once two of them have been run within 2% of each other in key and overall performance areas. No changes to the test scripts or data sets (with the exception of restores after each test) can be done to the test environment once tuning has begun so as to not damage the comparison to baseline results. The systems must be restarted prior to each test run to assure all cache is cleaned out. All effort will be made to run these tests at a time when system and network infrastructure utilization doesn't impact the results. Tests will be run in close proximity to our infrastructure to eliminate the public network from our environment.

Post test reporting and result assessment will be scheduled following each test. The team will compare these results to the baseline and a determination must be made to make additional changes to the parameter being tuned or return to the prior configuration and select another parameter to tune while keeping in mind that significant changes to any one parameter may require the retesting of some others. Careful work on identifying dependencies up front should minimize this impact.

If defects are identified in the application during testing, they will be recorded; however, changes to the application code should be avoided if possible so as not to affect baseline comparisons. If a change to the application is required new baselines will be established (and possibly the execution of prior tests to validate changes with the new application) before testing can continue.

When performing capacity testing against a GUI the focus will be on the ability of the interface to respond to user input.

During stress/load testing the tester will attempt to stress or load an aspect of the system to the point of failure. The goal being to determine weak points in the system architecture. The tester will identify peak load conditions at which the program will fail to handle required processing loads within required time spans.

	During Performance testing the tester will design test case scenarios to determine if the system meets the stated performance criteria (i.e. A Login request shall be responded to in 1 second or less under a typical daily load of 1000 requests per minute.). In both cases, the tester will determine the capacity of the system under a known set of conditions.
Regression Testing	As a result, of the user testing activities, problems will be identified that require correction. The State will notify the Vendor of the nature of the testing failures in writing. The Vendor will be required to perform additional testing activities in response to State and/or user problems identified from the testing results. Regression testing means selective re-testing to detect faults introduced during the modification effort, both to verify that the modifications have not caused unintended adverse effects, and to verify that the modified and related (possibly affected) System components still meet their specified requirements. a.) For each minor failure of an Acceptance Test, the Acceptance Period shall be extended by corresponding time defined in the Test Plan. b.) The Vendor shall notify the State no later than five (5) business days from the Vendor's receipt of written notice of the test failure when the Vendor expects the corrections to be completed and ready for retesting by the State. The Vendor will have up to five (5) business days to make corrections to the problem unless specifically extended in writing by the State. c.) When a programming change is made in response to a problem identified during user testing, a regression Test Plan should be developed by the Vendor based on the understanding of the program and the change being made to the program. The Test Plan has two objectives: **1.** validate that the change/update has been properly incorporated into the program; and **2.** validate that there has been no unintended change to the other portions of the program. d.) The Vendor will be expected to: 1. Create a set of test conditions, test cases, and test data that will validate that the change has been incorporated correctly; 2. Create a set of test conditions, test cases, and test data that will validate that the unchanged portions of the program still operate correctly; and 3. Manage the entire cyclic process. e.) The Vendor will be expected to execute the regression test, provide actual testing results, and certify its completion in writing to the State prior to passing the modified Software application to the users for retesting. In designing and conducting such regression testing, the Vendor will be required to assess the risks inherent to the modification being implemented and weigh those risks against the time and effort required for conducting the regression tests. In other words, the Vendor will be expected to design and conduct regression tests that will identify any unintended consequences of the modification while taking into account Schedule and economic considerations. In their Proposals Vendors must acknowledge their responsibilities for regression testing described in this section.
Security Review and Testing	IT Security involves all functions pertaining to the securing of State Data and Systems through the creation and definition of security policies, procedures and controls covering such areas as identification, authentication and non-repudiation. All components of the Software shall be reviewed and tested to ensure they protect

the State's hardware and software and its related Data assets.

Service Component	Defines the set of capabilities that:
Identification and Authentication	Supports obtaining information about those parties attempting to log onto a system or application for security purposes and the validation of users
Access Control	Supports the management of permissions for logging onto a computer or network
Encryption	Supports the encoding of data for security purposes
Intrusion Detection	Supports the detection of illegal entrance into a computer system
Verification	Supports the confirmation of authority to enter a computer system, application or network
Digital Signature	Guarantees the unaltered state of a file
User Management	Supports the administration of computer, application and network accounts within an organization.
Role/Privilege Management	Supports the granting of abilities to users or groups of users of a computer, application or network
Audit Trail Capture and Analysis	Supports the identification and monitoring of activities within an application or system
Input Validation	Ensures the application is protected from buffer overflow, cross-site scripting, SQL injection, and unauthorized access of files and/or directories on the server.

In their proposal, the Vendors must acknowledge their responsibilities for security testing. Tests shall focus on the technical, administrative and physical security controls that have been designed into the System architecture in order to provide the necessary confidentiality, integrity and availability. Tests shall, at a minimum, cover each of the service components. Test procedures may include 3rd party Penetration Tests (pen test) or code analysis and review.

Prior to the System being moved into production, the Vendor shall provide results of all security testing to the Department of Information Technology for review and acceptance. All Software and hardware shall be free of malicious code (malware).

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BIDDER _____ ADDRESS _____

BY _____
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(please type or print name)